



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,820	01/13/2006	Seung-Jae Kang	YOM 0284	3424
23413 7590 06/23/2008 CANTOR COLBURN, LLP 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER TOLEDO, FERNANDO L.				
ART UNIT 2823		PAPER NUMBER		
MAIL DATE 06/23/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/564,820

**Applicant(s)**

KANG, SEUNG-JAE

**Examiner**

Fernando L. Toledo

**Art Unit**

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)  
Paper No(s)/Mail Date 20060113
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (US Patent Application Publication US 2006/0152655 A1).

3. In re claim 7, Kim, in the US 2006/0152655 A1 discloses first and second gate lines transmitting gate signals to adjacent pixel rows and disposed adjacent to each other (Figure 2); a data line insulated from the first and the second gate lines and the data line; a first thin film transistor connected to the first gate line and the data line and including a first drain electrode overlapping the second gate line (Figure 2); a second TFT connected to the second gate line and the data line, disposed opposite the first TFT with respect to the data line, and including a second drain electrode overlapping the first gate line (Figure 2); a first pixel electrode connected to the first drain electrode and overlapping the second gate line (Figure 2); and a second pixel electrode connected to the second electrode and overlapping the first gate line (Figure 2).

4. In re claim 8, Kim discloses further comprising red, green or blue color filters disposed in a pixel area defined by intersections of the first and the second gate lines and the data line (Figure 18).

5. In re claim 9, Kim discloses wherein the first and the second TFTs comprise: first and second gate electrodes connected to the first and the second gate lines, respectively; first and second semiconductors overlapping the first and the second gate electrodes, respectively; and first and second source electrodes connected to the data line and overlapping the first and the second semiconductors, respectively (Figure 18).
6. In re claim 10, Kim discloses wherein the first and the second TFTs comprise: first and second gate electrodes connected to the first and the second gate lines, respectively; first and second semiconductors overlapping the first and the second gate electrodes, respectively; and first and second source electrodes connected to the data line and overlapping the first and the second semiconductors, respectively (Figure 2).
7. In re claim 11, Kim discloses further comprising a passivation layer interposed between the first and the second TFTs and the first and the second pixel electrodes and including organic insulator or inorganic insulator (Figure 3).
8. In re claim 12, Kim discloses wherein the passivation layer includes a first and a second contact holes to respectively connect the first and the second drain electrodes, and the first and the second pixel electrodes (Figure 3).
9. In re claim 13, Kim discloses wherein the contact hole overlaps the second gate line and the second contact hole overlaps the first gate line (Figure 7B).
10. In re claim 14, Kim discloses wherein the first pixel electrode does not overlap the first gate line, and the second pixel electrode does not overlap the second gate line (Figure 18).
11. In re claim 15, Kim discloses wherein the first and the second pixel electrodes overlap the data line (Figure 18).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fernando L. Toledo whose telephone number is 571-272-1867. The examiner can normally be reached on Mon-Fri 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fernando L. Toledo/  
Primary Examiner, Art Unit 2823

flt  
19 June 2008